#### APPENDIX 7

## Best Management Practices for Raptors and Associated Habitats September 2003

Raptor management would be administered under the auspices of Best Management Practices (BMPs). Management activities and land disturbing actions would be subject to the criteria and processes specified within these BMPs. The implementation of spatial and seasonal buffers under the BMPs would be comparable to the U.S.Fish and Wildlife Service, Utah Field Office "Guidelines for Raptor Protection From Human and Land Use Disturbances", January 2002" (Guidelines), Table 2. Modifications could be implemented if the following specified criteria have been met. Listed, proposed, candidate, and state-sensitive species would be emphasized; particularly bald eagle, golden eagle, peregrine falcon, ferruginous hawk, and burrowing owl. Modification of the buffers could be made pending results of Section 7 Consultation, except in the case of State Sensitive Species for which consultation is not required. All raptor species would continue to receive protection under the Migratory Bird Treaty Act (MBTA).

BLM would coordinate with the UDWR and FWS prior to modifying seasonal buffers for raptors to correspond more closely with regional variations in the nesting chronology of local raptor species.

Modifications of the spatial and seasonal buffers identified in the FWS "Guidelines" could be a viable management option. Modifications would ensure that nest protection would occur, but may also allow various considerations that could deviate from the buffers within the FWS "Guidelines."

Criteria that should be met, prior to implementing modifications to the spatial and seasonal buffer restrictions in the FWS "Guidelines", would include the following:

- 1. Completion a site specific assessment. See example (Attachment 1.)
- 2. Written documentation by the BLM Field Office Biologist would confirm {as stated above in coordination with UDWR and USFWS} that implementation of the modifications would not impact the success of the nest or the suitability of the site for future nesting. The field office biologist would provide their recommendation to the appropriate decision maker. Modifications to the "Guidelines" would not be implemented if it is determined that impacts to the nest would occur or the suitability of the site for future nesting would be jeopardized.
- 3. A monitoring strategy would be employed by a BLM, or other qualified raptor biologist. Impacts would be documented of authorized activities to determine if the stipulations and modifications were implemented as described in the EA or Conditions of Approval, and were adequate to protect the nest site. Should impacts be identified during monitoring of an activity, BLM

would develop an appropriate course of action that would minimize or mitigate to the extent possible. A report on the monitoring would be completed and forwarded to UDWR for incorporation into the NHP raptor database.

4. Long term population monitoring: The management objective is to establish and implement a post-project and post-mitigation monitoring plan to determine possible impacts to the local raptor populations as well as success of mitigation measures. Monitoring should include documentation of raptor nesting success, use of historical roost concentration areas, as well as recovery of affected prey base and habitats. Individual strategies for specific species monitoring would be developed cooperatively between BLM, UDWR, USFWS and the action proponent.

#### Habitat Enhancement

Raptor habitat management and enhancement, both within and outside of buffers, would be an integral part of these BMPs, with the understanding that in order for raptors to maintain high densities and maximum diversity, it is necessary that the habitat upon which they and their prey species depend must be managed to promote healthy and productive rangelands. Habitat loss, fragmentation, and habitat disturbance would be minimized and mitigated to the extent practical.

#### Protection of Nest Sites and Buffer Zones

Note: Maintenance and operations of existing facilities are acceptable within these guidelines.

#### Unoccupied nests:

(1) All Activities, including New Oil and Gas Leases: Surface-disturbing activities occurring outside of the breeding season would be allowed during a seven-year nest monitoring period, as long as the activity would not cause the nest site to become unsuitable for future nesting. Facilities and other permanent structures would be allowed as long as they meet these criteria.

After seven years without occupancy, authorizations for activities within the identified buffer for the species involved would be allowed.

- (2) Existing Oil and Gas Leases: Nests of the five raptor species listed above in the Introduction, which occur on existing oil and gas leases, would continue to receive protection. Surface-disturbing activities occurring outside of the breeding season would be allowed during a two-year nest monitoring period, as long as the activity would not cause the nest site to become unsuitable for future nesting. Facilities and other permanent structures would be allowed as long as they meet these criteria.
- (3) All Activities: Non-permanent land use activities would be allowed within the spatial buffer of nests during the nesting period, as long as those activities are shown to be non-impacting to nesting raptors.

#### Occupied Nests:

**All leases**: Land use activities which would have an adverse impact would not be allowed within the spatial buffer of occupied nests.

#### Consideration of Mitigation Measures

Mitigation measures would be applied as necessary to mitigate adverse impacts of resource uses and development on nesting raptors.

#### Specific Strategies to be Implemented Regarding Other Resource Uses and Development

Following are management strategies designed to reduce or eliminate potential conflicts between raptors and other resource uses. This is a list of examples and is not intended to be an all-inclusive list. In all cases where a proposal for an activity on BLM lands is made and an EA developed, the site-specific analysis process identified in Attachment 1 should be implemented to identify and mitigate impacts to raptors from the proposal. These strategies apply to both BLM and applicant-generated proposals. The strategies are as follows:

#### A. Cultural Resources

1. Excavation and studies of cultural resources in caves and around cliff areas should be delayed until a qualified biologist surveys the area to be disturbed or impacted by the activity for the presence of raptors or nest sites.

#### B. Forestry and Harvest of Woodland Products

1. Timber harvest would be subject to an analysis and be conducted in a manner that meets raptor nest and snag protection criteria. This would also apply to area for wood gathering and firewood sales.

#### C. Livestock Grazing

- 1. Manage rangelands and riparian areas in a manner that promotes proper functioning condition. Rangeland Standards and Guidelines should be implemented on each grazing allotment. It is important to note that certain raptor species are tied to specific habitat types, and that consideration must be made on a site specific basis when vegetation manipulation projects are proposed, to determine which raptor species may benefit and which may be negatively impacted by the desired vegetation composition following treatment.
- 2. Locations of sheep camps and other temporary intrusions should be located in areas away from nest sites during the nesting season. Placement of salt and mineral blocks should also be located away from nesting areas.

#### D. OHV Use

- 1. Special Recreation Management Areas (SRMAs) that are developed for OHV use should not be located in areas that have important nesting, roosting, or foraging habitat for raptors. Proposed areas should be inventoried to make certain that lands where high OHV use is expected are free of nesting sites as part of the review for consideration of the designation.
- 2. OHV use will be limited to designated roads, trails and managed open areas. Lands categorized as "Open" for OHV use should not be in areas important to raptors for nesting, roosting, and foraging
- 3. When proposals for OHV races and other events are received, the area to be impacted, should be surveyed by field office biologist to determine if the area is utilized by raptors. Potential conflicts should be identified and mitigated prior to the issuance of any permit.

#### E. Oil and Gas Development

- 1. Existing leases may be modified using the Code of Federal Regulations (CFR), 43 CFR 3101.1-2, which allows for well site location and timing to be modified from that requested by the lessee to mitigate conflicts at the proposed site, and states that the location can be moved up to 200 meters and the timing of the actual drilling can be delayed for 60 days to mitigate environmental concerns. Provisions are also present within the lease, which allow the BLM to impose additional restrictions at the permitting phase, if the restrictions will prevent unnecessary and undue degradation of lands or resources. BLM may employ additional restrictions in the context of the land use plan on a lease to protect a species which is listed by a state as threatened or endangered, but is not Federally-listed.
- 2. Raptor issues would be evaluated and baseline data reviewed, prior to the time that lands are made available for oil and gas leasing.

#### F. Realty

- 1. Lands proposed for disposal that includes raptor nesting, roosting, or important foraging areas would be analyzed and evaluated for the relative significance of these resources before a decision is made for disposal or retention.
- 2. A priority list of important raptor habitat areas on state and private lands should be developed and utilized as lands to be acquired by BLM when opportunities arise to exchange or otherwise acquire lands.

3. Lands and realty authorizations should include appropriate stipulations to avoid and mitigate impacts to raptors.

#### G. Recreation

- 1. Proposals for authorized events such as mountain bike races, or development of biking trails near raptor nesting areas should be avoided.
- 2. Rock climbing activities should be authorized only in areas where there are no conflicts with cliff nesting raptors.
- 3. In existing SRMAs, high recreation use areas where nest sites have been made unsuitable by existing disturbance or habitat alteration, mitigation should be considered to replace nest sites with artificial nest structures in nearby suitable habitat, if it exists, and consider seasonal protection of nest sites through fencing or other restrictions.
- 4. Dispersed recreation should be monitored to identify where this use may be impacting nesting success of raptors.

#### H. Wild Horse Program

1. Impacts to raptors from the wild horse and burro program generally can be attributed to overgrazing in areas where horse numbers are in excess of the carrying capacity of the range. Removal of horses, as described in the various herd management area plans, should continue, to prevent further damage to rangelands.

#### I. Wilderness

1. Wilderness or WSA designation is considered a positive impact to raptors as most permanent developments are not allowed and lands are managed to maintain natural qualities, including native wildlife.

#### 7. Inventory and Monitoring

A. Each Field Office should actively manage a raptor database as part of the BLM Corporate database. Raptor data should be collected and compiled utilizing the Utah Raptor Data Standards protocol, so that personnel from other agencies can access the data. This database should be updated as new inventory and monitoring data becomes available. The data should also be forwarded to UDWR and the NHP, which is identified as the central location for raptor data storage and analysis for the State of Utah.

B. Use of Seasonal Employees and volunteers, as well as "Challenge Cost Share" projects, could be utilized to augment the inventory and monitoring of raptor

nests within the planning unit, with the data entered into the above-mentioned databases at the close of each nesting season. Project proponents, such as energy development companies, should be encouraged to participate and help support an annual raptor nest monitoring effort within their areas of interest.

C. Active nest sites should be monitored during all authorized activities that may have an impact on the behavior or survival of the raptors at the nest site. A qualified biologist would conduct the monitoring and a determination made as to the impacts of the activity. A final report of the impacts of the project should be placed in the EA file, with a copy submitted to the NHP. The report would be made available for review and should identify what activities may affect raptor-nesting success, and should be used to recommend appropriate buffer zones for various raptor species.

As data are gathered, and impact analysis is more accurately documented, "adaptive management" could be applied. Authorization of future activities could take this information into account, better protecting the raptors, and possibly allowing more development and fewer restrictions, if data indicated that the restrictions implemented are beyond those necessary to protect raptors.

#### **ATTACHMENT 1**

### Sample Site Specific Analysis

Observer(s)	Date		
	ite visit to the area of the g to BLM data standards		nplete the raptor nest site data
2. Area of Inter	rest Documentation (Bold i	tems require completion,	other information is optional)
State	Office	Management Unit	
Project ID#			
<b>Location (Desc</b>	eription)		
Legal T, F	R, Sec, 1/4	., 1/4,	or UTM Coordinates
Latitude	Longitude		
Photos Taken	Y( ) N( )		
Description of p			
Raptor Species	8	Confirmed	Unconfirmed
Distance From	Proposed Disturbance to		
		Roost	

Line of Site Evaluation From: Nest
Perch Roost
Extent of Disturbance: Permanent Temporary  Distance Acreage
Length of Time Timing Variations Disturbance Frequency
Other Disturbance Factors: Yes (If yes, explain what and include distances from nest to disturbances) No
Approximate Age of Nest: New Historical: (Number of Years)  Evidence of Use (Describe):
Habitat Values Impacted:
Proportion of Habitat Impacted (Relate in terms of habitat available):
Estimated Noise Levels of Project (db):
Available Alternative(s) (e.g., location, season, technology):

Associated
Activities:
Cumulative Effects of Proposal and Other Actions in Habitat Not Associated With the Proposal:
Potential for site Rehabilitation: HighLow
Notes/Comments:
Summary of Proposed Modifications:
Possible modifications to the spatial and seasonal buffers within the FWS "Guidelines" include the following:
Detianala
Rationale:

# **Summary of Proposed Mitigation Measures:** Possible mitigation measures related to the proposal include the following: Rationale: **Summary of Alternatives Considered:** Possible alternatives to the proposal include the following: Rationale: **Recommendation to FO Manager Based on Above Findings:** Field Office Wildlife Biologist Date

#### **ATTACHMENT 2**

#### **References Cited**

Call, M., 1979, "Habitat Management Guides For Birds Of Prey." U.S. Department of Interior, Bureau of Land Management. Tech. Note 338. Denver, Co. 70 pp.

Code of Federal Regulations; 43 CFR 3101.1-2, Leasing Regulations

Eagle Protection Act; U.S.C. 668

Executive Order (EO) 13186; 2001. U.S. Department of Interior, Bureau of Land Management.

Endangered Species Act (ESA); 16 U.S.C. 1513-1543

Federal Land Policy Management Act (FLPMA)

Migratory Bird Treaty Act (MBTA); 16 U.S.C. 703-712

National Environmental Policy Act of 1970 (NEPA); 42 U.S.C. 4321

Romin, Laura A. and James A. Muck, 2002, "Utah Field Office Guidelines For Raptor Protection From Human And Land Use Disturbances." U.S. Department of Interior, U.S. Fish and Wildlife Service, Utah Field Office, Salt Lake City, Utah.

Standards for Rangeland Health and Guidelines for Grazing Management; 1997. U.S. Department of Interior, Bureau of Land Management.

Parrish, Jimmie R., Howe, Frank, and Russell Norvell, 2001, "Utah Partners in Flight Avian Conservation Strategy." Utah Division of Wildlife Resources Publication Number 99-40.

U.S. Department of the Interior, Bureau of Land Management; 6840 Manual.

Wildlife Resources Code of Utah; Title 23, Utah State Code